

Work Order ID 165585

Monday, August 28, 2017 11:44:45 AM

165585

Page 1

Item ID: D4716-3

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Duct Hose

Start Date: 8/29/2017 Start Qty: 4.00

4

Cust Item ID:

Required Date: 9/13/2017 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan:

DAS
21
9-89Date: **AUG 29 2017**

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D4716

A

100

0.00

100

Purchasing

Memo

0.00

Purchasing

Issue P/O:

MANUFACTURE AS PER DWG D4716

Supplier: CUSTOM DUCTS

Certificate of conformity is required

4 DAS
13
9-89
AUG 30 2017

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Memo

0.08

Packaging

4x SP 17-9-19

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					

Work Order ID 165585

Monday, August 28, 2017 11:44:45 AM

165585

Page 2

Item ID: D4716-3 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Duct Hose
Start Date: 8/29/2017 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 9/13/2017 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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120	QC6- All purchased or subcontracted products	0.00							
120									
QC	Memo	0.00							
Quality Control									

130	Identify as per dwg & Stock Location: 5F221A	0.00							
130									
Packaging	Memo	0.04							
Packaging									

SEP 20 2017

140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.40							
Quality Control									

SEP 20 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					

Root Cause				FAULT CATEGORY			
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
				Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
				Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
				Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
				Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
				Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
				Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
				Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
				OTHER : _____			

Picklist Print

Monday, August 28, 2017 11:44:48 AM

Page 1

Work Order ID: 165585

165585

Parent Item: D4716-3

D4716-3

Parent Item Name: Duct Hose

Start Date: 8/29/2017

Required Date: 9/13/2017

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A 12.11.08 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4716-3P		Purchased	No			110	Each	0.0000	1	4			
D4716-3P									**				
Duct Hose													

4X SP 17-9-19

DQA: _____ Date: _____



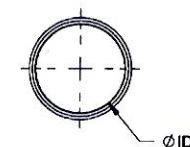
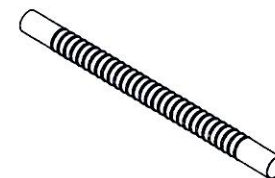
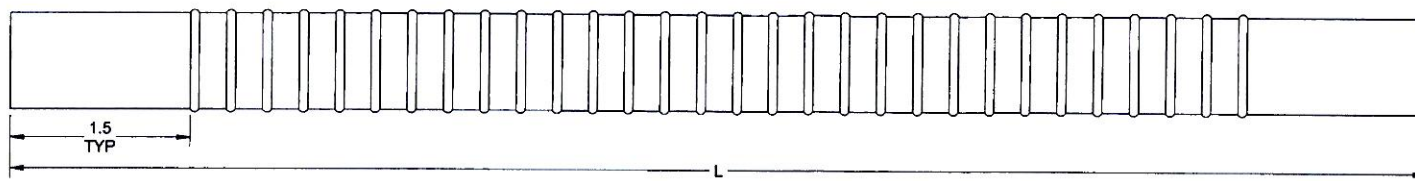
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

SPECIFICATION CONTROL DRAWING



DART PART NUMBER	DESCRIPTION	POSSIBLE VENDOR	VENDOR PART NUMBER	MATERIAL	ID	L	WEIGHT (lb)
D4716-1	DUCT HOSE	CUSTOM DUCTS	SCEET	SILICONE RUBBER	0.75	24.0	0.2
D4716-3	DUCT HOSE	CUSTOM DUCTS	SCEET	SILICONE RUBBER	0.75	28.0	0.2
D4716-5	DUCT HOSE	CUSTOM DUCTS	SCEET	SILICONE RUBBER	0.75	41.0	0.3

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 165585 MJS
1708-29

D4716-X DUCT HOSE

RELEASED
2012-11-05
MD

NOTES:

- 1) MATERIAL: PER TABLE
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: PER TABLE

A	NEW ISSUE	RF	12.07.25
REV.	DESCRIPTION	BY	DATE
DESIGN	RF		
DRAWN	RF		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	12.07.25		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D4716** REV. A
SHEET 1 OF 1

TITLE **DUCT HOSE** SCALE NTS

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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO37617**

Purchase Order Date 8/30/2017

PO Print Date 8/30/2017

Page Number 1 of 2

Order From :
CUSTOM DUCT
179 BEAVER BERRY ROAD

LIMINGTON, MAINE 04049

VU-CD001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

AUG 31 2017

Contact Name	Buyer	Diane Baker
Vendor Phone 207-637-3000	Customer POID	
Ship To Contact	Customer Tax #	10127-2607
Ship To Phone	Terms	Net 30
Ship Via:	Currency	USD
Ship Acct:	FOB	Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	D4716-1P As per Dwg D4716 Rev. A B165559	Duct Hose	9/12/2017 Yes 9/12/2017		4.00 Each	\$30.00	\$120.00
Line Total:							\$120.00
2	D4716-3P As per Dwg D4716 Rev. A B165585	Duct Hose	9/12/2017 Yes 9/12/2017		4.00 Each	\$34.00	\$136.00
Line Total:							\$136.00
3	D4716-5P As Per Dwg D4716 Rev. A B165718	Duct Hose	9/12/2017 Yes 9/12/2017		12.00 Each	\$38.00	\$456.00

Note:

8/30/2017

Custom Duct

179 Beaver Berry Rd
 Limington, ME 04049
 PH 1 800 863 2620

Invoice

Date	Invoice #
9/14/2017	2075

Bill To
Dart Aerospace 1270 Aberdeen Street Hawkesbury, ON K6A 1K7

Ship To
Dart Aerospace 1270 Aberdeen Street Hawkesbury, ON K6A 1K7

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
PO037617	Net 30		9/14/2017	Federal Express		

Quantity	Item Code	Description	Price Each	Amount
12	SCEET	Double Wall SCEET 3 X 41" Your D4716-5P	38.00	456.00
4	SCEET	Double Wall SCEET 3 X 28" Your D4716-3P	34.00	136.00
4	SCEET	Double Wall SCEET 3 X 24" Your D4716-1P	30.00	120.00
	Ship	Shipping Charge Fedex collect	0.00	0.00

Phone #	Fax #	E-mail	Total	\$712.00
207 637 3000	207 637 3000	kinney@fairpoint.net		

Custom Duct
Beaver Berry Rd.
Angton, ME 04049

CERTIFICATE OF CONFORMANCE

Customer Name: Dart Aerospace Ltd. Purchase Order No: PO37617

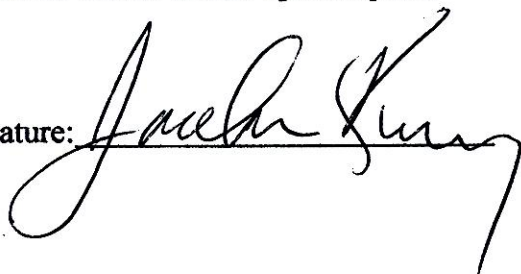
4 EACH SCEET 3 X 24" Your D4716-1P WITH CUFFS

12 EACH SCEET 3 X 41" Your D4716-5P WITH CUFFS

4 EACH SCEET 3 X 28" Your D4716-3P WITH CUFFS

This is to certify that the products, systems and/or services listed here-in have been manufactured, inspected and tested in accordance with Custom Duct and industry standards. It is further certified that the items listed here-on are in compliance with the provisions of your purchase order/ work order listed above. Inspection and test records and material certifications are on file and available upon request.

Signature:



Date: 14 September 2017